

WHAT IS CLAIMED IS:

1. A medical device comprising: a graft material, a stent affixed to and extending from the graft material, and at least two spaced apart fastenings affixing the stent to the graft material, each fastening
5 including at least one turn of an elongate flexible fibre through the graft material and around a portion of the stent.
2. A medical device as in Claim 1 wherein each fastening has two turns of the elongate flexible fibre material through the graft material and around the portion of the stent.
- 10 3. A medical device as in Claim 1 wherein the at least two fastenings each include a knot arrangement to tie off the elongate flexible fibre.
4. A medical device as in Claim 3 wherein the knot arrangement includes at least two thumb knots and preferably four thumb knots.
- 15 5. A medical device as in Claim 3 wherein the knot arrangement is situated on the outside of the graft material.
6. A medical device as in Claim 1 wherein the flexible fibre is at least one of a mono-filament suture material and braided suture material.
- 20 7. A medical device as in Claim 1 wherein the graft material is at least one of a bio-compatible woven material and a knitted material selected from the group comprising polyester and expanded polytetrafluoroethylene.

8. A medical device as in Claim 1 wherein the stent is selected from the group comprising a balloon expandable stent or self-expanding stent.
9. A medical device as in Claim 1 wherein the stent is a self-
5 expanding Z-stent.
10. A medical device as in Claim 9 wherein the Z-stent is formed from a plurality of struts with bends in between them and the at least two spaced apart fastenings are placed at the junction of the struts and the bend of a particular apex in a Z-stent.
- 10 11. A medical device as in Claim 9 wherein the Z-stent is formed from a plurality of struts with bends in between them and a first of the fastenings is positioned at the apex of the struts on the bend and the other of the fastenings is positioned on one of the struts adjacent to the bend.
- 15 12. A medical device as in Claim 1 wherein the fastenings are spaced apart enough that the turns of fibre do not pass through the same portion of the graft material.
13. A medical device as in Claim 1 wherein the spacing is from 0.5mm to 2mm.
- 20 14. A medical device comprising a graft material, a stent having first and second struts and a bend therebetween, a first fastening wrapped around at least one of the first strut, the second strut or the bend and through the graft material, and a second fastening a minimum spacing away from the first fastening and wrapped around at least one

of the first struts, the second strut or the bend and through the graft material.

15. A medical device as in Claim 14 wherein the fastening is an elongate flexible fibre.

5 16. A medical device as in Claim 14 wherein each of the first and second fastenings are wrapped around twice.

17. A medical device as in Claim 15 wherein the two fastenings are spaced apart by from half to two millimetres.

10 18. A medical device as in Claim 14 wherein the stent is exposed and extends away from the graft material.

19. A medical device as in Claim 14 wherein the stent is a self-expanding Z stent which incorporates a plurality of the struts with the bends between adjacent struts.

15 20. A medical device as in Claim 14 wherein the first and second fastenings are formed from a single length of suture material and spaced apart around a bend of the stent.

21. A medical device as in Claim 14 wherein the first and second fastenings comprise a single turn around each stent adjacent a bend of the stent and a double turn around the bend.

20 22. A medical device comprising a graft material, a stent having first and second struts and a bend therebetween, a first fastening wrapped around the first strut adjacent the bend and a second fastening

wrapped around the second strut adjacent the bend, each of the first and second fastenings comprising machine sewn stitches engaging the graft material either side of the respective struts and passing over the strut.

23. A medical device as in Claim 22 wherein there are at least five
5 stitches on each strut.